



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,434	02/10/2004	John K. Roberts	GEN10 P-453	9417

28469 7590 08/10/2005

PRICE, HENEVELD, COOPER, DEWITT, & LITTON,  
LLP/GENTEX CORPORATION  
695 KENMOOR, S.E.  
P O BOX 2567  
GRAND RAPIDS, MI 49501

EXAMINER

DHARIA, PRABODH M

ART UNIT PAPER NUMBER

2673

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/775,434	<b>Applicant(s)</b> ROBERTS ET AL.	
	<b>Examiner</b> Prabodh M. Dharia	<b>Art Unit</b> 2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04-11-05,08-10-04</u> . | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2673

1. **Status:** Receipt is acknowledged of papers submitted on June 27, 2005 under amendments, which have been placed of record in the file. Claims 1-30 are pending in this action.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Gleckman (5,645,337).

Regarding Claim 18, Gleckman teaches an information display (Col. 1, Lines 13-19), comprising: a diffuser positioned between a backlit liquid crystal display (Col. 1, Lines 27-31, Col. 2, Lines 22-38) and backlighting associated with said liquid crystal display (Col. 1, Lines 27-33, Col. 2, Lines 30-32), wherein said diffuser redirects light rays emitted by said backlighting as a function of at least one of the following (Col. 1, Lines 29-38, Col. 2, Lines 23-53); the position of said liquid crystal display relative to at least one anticipated viewer and a planar surface of said diffuser relative to a viewing angle of at least one anticipated viewer (Col. 2, Lines 22-63).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-17,22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tonar et al. (US 2005/0007645 A1) in view of Weller et al. (US 2004/0032675 A1).

Regarding Claim 1, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); said information display comprising a negative mode (page 21, paragraph 21, Lines 16-19), backlit, liquid crystal display (page 21, paragraph 184,185), having at least two characters (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8), each of said characters has individual backlighting associated therewith (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith,

Art Unit: 2673

wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 2, Tonar et al. teaches a display driver having more outputs than said liquid crystal display has characters, wherein at least one output of said display driver is used to control said backlighting (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5).

Art Unit: 2673

Weller et al. recite or disclose display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Regarding Claim 3, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of the reflectivity of said automatically dimming reflective element (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5).

Regarding Claim 4, Tonar et al. teaches a diffuser positioned between a backlit liquid crystal display and backlighting associated with said liquid crystal display, wherein said diffuser redirects light rays emitted by said backlighting as a function of the position of said liquid crystal display relative to at least one anticipated viewer (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265).

Regarding Claim 5, Tonar et al. teaches a diffuser positioned between a backlit liquid crystal display (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29,

Art Unit: 2673

paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5), wherein said diffuser redirects light rays emitted by said backlighting as a function of a planar surface of said diffuser relative to a viewing angle of at least one anticipated viewer (page 4, paragraph 21, 16-22, page 8, paragraph 91, page 22, paragraph 190, page 23, paragraph 192, page 29, paragraphs 242,243).

Regarding Claim 6, Tonar et al. teaches reflective element is at least partially transmissive and an optimum light ray wavelength transmission of said reflective element is substantially equal to the predominant wavelength of light rays emitted from said information display (page 30, paragraph 253, page 3, paragraph 19, page 18, paragraph 165, Lines 1-14, page 19, paragraph 169, Lines 14-19, page 20, 21, paragraph 179).

Regarding Claim 7, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of an ambient light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 8, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of a glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page

Art Unit: 2673

30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 9, Tonar et al. teaches an information display (page 21, paragraph 21, Lines 16-19), comprising: a liquid crystal display (page 21, paragraph 184,185), having at least two characters (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8), with each character having associated backlighting (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8); and a display driver having more outputs than said liquid crystal display has characters (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8), wherein at least one output of said display driver is used to control said backlighting (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column,



Art Unit: 2673

Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 10, Tonar et al. teaches a diffuser positioned between a backlit liquid crystal display and backlighting associated with said liquid crystal display, wherein said diffuser redirects light rays emitted by said backlighting as a function of the position of said liquid crystal display relative to at least one anticipated viewer (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265).

Regarding Claim 11, Tonar et al. teaches a diffuser positioned between a backlit liquid crystal display, wherein said diffuser redirects light rays emitted by said backlighting as a function of a planar surface of said diffuser relative to a viewing angle of at least one anticipated viewer (page 4, paragraph 21, 16-22, page 8, paragraph 91, page 22, paragraph 190, page 23,

Art Unit: 2673

paragraph 192, page 29, paragraphs 242,243).

Regarding Claim 12, Tonar et al. teaches a rearview mirror assembly, comprising: a backlit liquid crystal display positioned behind an automatically dimming reflective element (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265) wherein the intensity of said backlit liquid crystal display is a function of the reflectivity of said automatically dimming reflective element (page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of

Art Unit: 2673

backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 13, Tonar et al. teaches a diffuser positioned between a backlit liquid crystal display and backlighting associated with said liquid crystal display (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265), wherein said diffuser redirects light rays emitted by said backlighting as a function of the position of said liquid crystal display relative to at least one anticipated viewer (page 4, paragraph 21, 16-22, page 8, paragraph 91, page 22, paragraph 190, page 23, paragraph 192, page 29, paragraphs 242,243).

Regarding Claim 14, Tonar et al. teaches a diffuser positioned between a backlit liquid crystal display (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265), wherein said diffuser redirects light rays emitted by said backlighting as a function of a planar surface of said diffuser relative to a

Art Unit: 2673

viewing angle of at least one anticipated viewer (page 4, paragraph 21, 16-22, page 8, paragraph 91, page 22, paragraph 190, page 23, paragraph 192, page 29, paragraphs 242,243).

Regarding Claim 15, Tonar et al. teaches reflective element is at least partially transmissive and an optimum light ray wavelength transmission of said reflective element is substantially equal to the predominant wavelength of light rays emitted from said information display (page 30, paragraph 253, page 3, paragraph 19, page 18, paragraph 165, Lines 1-14, page 19, paragraph 169, Lines 14-19, page 20, 21, paragraph 179).

Regarding Claim 16, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265), is a function of an ambient light sensor (page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 17, Tonar et al. teaches reflective element is automatically dimming (page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253) and the intensity of said backlit liquid crystal display (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31,

Art Unit: 2673

paragraph 263-265), is a function of a glare light sensor (page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 22, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); wherein reflective element is at least partially transmissive and an optimum light ray wavelength transmission of said reflective element is substantially equal to the predominant wavelength of light rays emitted from said information display (page 30, paragraph 253, page 3, paragraph 19, page 18, paragraph 165, Lines 1-14, page 19, paragraph 169, Lines 14-19, page 20, 21, paragraph 179).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines

Art Unit: 2673

11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 23, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of an ambient light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 24, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of a glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 25, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective

Art Unit: 2673

element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); wherein the intensity of said backlit liquid crystal display is a function of an ambient light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of

Art Unit: 2673

invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 26, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of a glare light sensor (page 21, paragraph 184,185, page 25; paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 27, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); wherein the intensity of said backlit liquid crystal display is a function of a glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.



Art Unit: 2673

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 28, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); wherein the contrast of said backlit liquid crystal display is a function of an ambient light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253,

Art Unit: 2673

Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253,256, page 31, paragraph 256, page 32, paragraphs 271-273).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Regarding Claim 29, Tonar et al. teaches reflective element is automatically dimming and the contrast of said backlit liquid crystal display is further a function of a glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253,256, page 31, paragraph 256, page 32, paragraphs 271-273).

Regarding Claim 30, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); wherein the contrast of said backlit liquid crystal display is a function of an glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253,256, page 31, paragraph 256, page 32, paragraphs 271-273).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-

Art Unit: 2673

11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

6. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tonar et al. (US 2005/0007645 A1) in view of Weller et al. (US 2004/0032675 A1) and Gleckman (5,645,337).

Regarding Claim 19, Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); said information display comprising a negative mode (page 21, paragraph 21, Lines 16-19), backlit, liquid crystal display (page 21, paragraph 184,185), having at least two characters (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page

Art Unit: 2673

29, paragraph 239, Lines 3-8), each of said characters has individual backlighting associated therewith (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8); a display driver having more outputs than said liquid crystal display has characters, wherein at least one output of said display driver is used to control said backlighting (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5); and a diffuser positioned between a backlit liquid crystal display (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265), wherein said diffuser redirects light rays emitted by said backlighting as a function of a planar surface of said diffuser relative to a viewing angle of at least one anticipated viewer (page 4, paragraph 21, 16-22, page 8, paragraph 91, page 22, paragraph 190, page 23, paragraph 192, page 29, paragraphs 242,243) and wherein said an automatically dimming reflective element (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, 4,5, page 29, paragraph 243, Lines 1-13, page 31, paragraph 263-265) wherein the intensity of said backlit liquid crystal display is a function of the reflectivity of said automatically dimming reflective element (page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253) and wherein said reflective element is at least partially transmissive and an optimum light ray wavelength transmission of said reflective element is substantially equal to the predominant

Art Unit: 2673

wavelength of light rays emitted from said information display (page 30, paragraph 253, page 3, paragraph 19, page 18, paragraph 165, Lines 1-14, page 19, paragraph 169, Lines 14-19, page 20, 21, paragraph 179).

However, Tonar et al. fails to recite or disclose backlit, liquid crystal display, having at least two characters, each of said characters has individual backlighting associated therewith, wherein said backlighting of a given character is controllable independent of backlighting of any other character.

However, Weller et al. recite or disclose a rearview mirror assembly (page 8, paragraph 73, Line 2), comprising: an information display (page 9, paragraph 76, right hand column Lines 27—29) at least partially positioned behind a reflective element (page 9, paragraph 73, Lines 1-11) with respect to an anticipated viewer said information display comprising backlit (page 9, paragraph 73 Lines 6-11), liquid crystal display (page 17, paragraph 130, right hand column, Lines 15,16, Lines 2,3), having at least two characters (page 11, paragraph 87, 4-11), each of said characters has individual backlighting associated therewith (page 11, paragraph 89, Lines 11-17), wherein said backlighting of a given character is controllable independent of backlighting of any other character (page 11, paragraph 89, left hand column, Lines 12-14, right hand column 1-11).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Weller et al. in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting which includes compass system and display is a liquid crystal display.

Art Unit: 2673

Tonar et al. teaches a rearview mirror assembly (page 3, paragraph 21, Lines 1,2), comprising: an information display at least partially positioned behind a reflective element with respect to an anticipated viewer (page 3, paragraph 21, Lines 1-5, page 21, paragraph 184, Lines 9-13); wherein the contrast of said backlit liquid crystal display is a function of an glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253,256, page 31, paragraph 256, page 32, paragraphs 271-273).

However, Tonar et al. fails to recite specifically a diffuser positioned between a backlit liquid crystal display and backlighting associated with said liquid crystal display, wherein said diffuser redirects light rays emitted by said backlighting as a function of at least one of the following; the position of said liquid crystal display relative to at least one anticipated viewer and a planar surface of said diffuser relative to a viewing angle of at least one anticipated viewer.

However, Gleckman teaches an information display (Col. 1, Lines 13-19), comprising: a diffuser positioned between a backlit liquid crystal display (Col. 1, Lines 27-31, Col. 2, Lines 22-38) and backlighting associated with said liquid crystal display (Col. 1, Lines 27-33, Col. 2, Lines 30-32), wherein said diffuser redirects light rays emitted by said backlighting as a function of at least one of the following (Col. 1, Lines 29-38, Col. 2, Lines 23-53); the position of said liquid crystal display relative to at least one anticipated viewer and a planar surface of said diffuser relative to a viewing angle of at least one anticipated viewer (Col. 2, Lines 22-63).

Thus it would have been obvious to one in the ordinary skill in the art at the time of

Art Unit: 2673

invention was made to incorporate the teaching of Gleckman in to the Tonar et al. teaching, to be able to provide a display device with illumination system for providing high brightness, even backlighting for an image plane such as a planar liquid crystal display.

Regarding Claim 20, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of an ambient light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

Regarding Claim 21, Tonar et al. teaches reflective element is automatically dimming and the intensity of said backlit liquid crystal display is a function of a glare light sensor (page 21, paragraph 184,185, page 25, paragraph 206, Lines 9-13, page 29, paragraph 239, Lines 3-8, page 30, paragraph 249, Lines 5,6, paragraph 253, Lines 4,5, page 24, paragraph 200, 202, page 25, paragraph 206, 209,210, page 29, paragraph 240, page 30, paragraphs 249-253).

### ***Response to Arguments***

7. Applicant's arguments with respect to claim1-30 have been considered but are moot in view of the new ground(s) of rejection.



***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marcus et al. (6,291,906) Information display for vehicles.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 571-272-7668. The examiner can normally be reached on M-F 8AM to 5PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Application/Control Number: 10/775,434

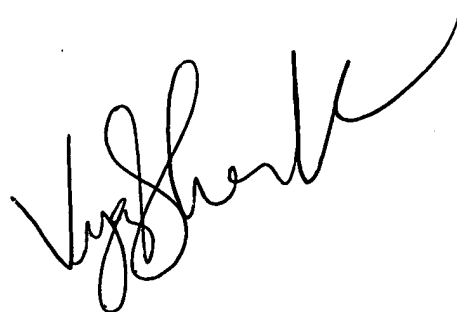
Page 25

Art Unit: 2673

PD

AU2673

August 02, 2005

A handwritten signature in black ink, appearing to read 'Vijay Shankar', written in a cursive style.

**VIJAY SHANKAR**  
**PRIMARY EXAMINER**